

## PROGRAMMING TUTORIAL

# Style Counsel



### On the CD

The audio files used in this month's *Style Counsel* are on the cover CD in formats for both PC and Mac users.



## ELECTRO AND GHETTOTEK

We're always keen to tie our colours to the cutting-edge mast, and so here's an introduction to GhettoTek, the latest sound to come screaming out of the motor city...

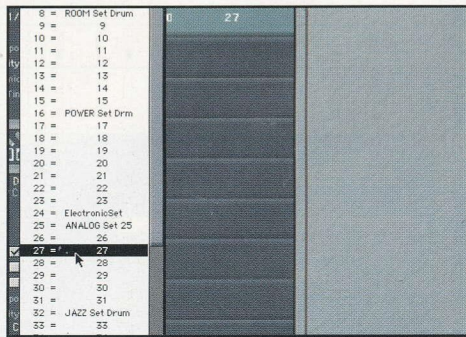
**W**e all know the deal with musical genres: as soon as a new one appears, a variant comes into play and finds favour with the intelligentsia. Then, a short while later, someone has comes up with a new song and the genre takes another twist, often entering the mainstream as a result. A classic example was the Speed Garage craze of the mid 90s: it may have initially found favour with the underground club scene, but add a song or two here and a couple of radio-friendly tweaks there, and before you know it Craig David's doing far more than OK – he's bleedin' minted! Of course, we're not citing UK Garage as the only example, as it's basically been no different with any musical style since the invention of... well, the gramophone. So you'll understand that a new sound from Detroit called GhettoTek may be cause for

excitement. Essentially, GhettoTek's roots lie firmly in the electro camp, and judging by the tunes that we've heard coming out of 'the scene' so far, it also borrows heavily from the Electro Funk vibe of the late 80s and early 90s.

While at this point in time the whole style is definitely groove-based (and as such its appeal is more suited to clubland), it surely must only be a matter of time before someone again has the bright idea of combining this fledgling genre with a song structure and quite possibly hoovers up a large chunk of cash from the results. So, if we've whetted your entrepreneurial appetite, you might just be interested in this month's *Style Counsel*, which is exclusively devoted to electro and some of the possibilities that lie beyond. Remember, you heard it here first!

## Electro: Back to the old skool

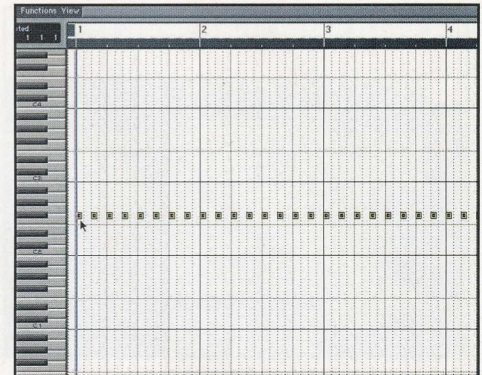
Recreating classic sounds in the virtual world



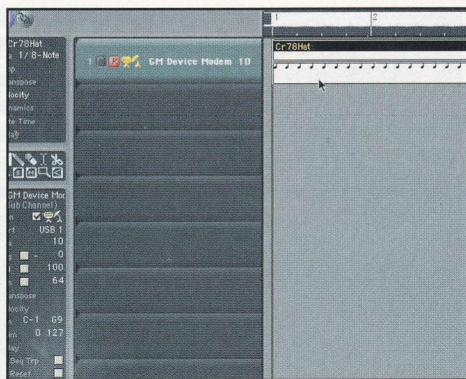
**1** All early electro beats were based around antique drum machines, and in particular, the Roland CR-78 – a strange box that sounded great but was based on the kind of auto-accompaniment drum boxes found on home organs. Nonetheless, this has become such a classic machine that many sound modules contain a dedicated CR-78 kit, such as the one in our SC-8850.



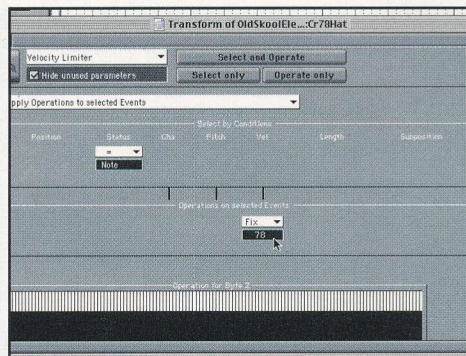
**2** For our first old skool electro groove we're going to use the CR-78 kit as the starting point of our drums. The appropriate Program Change for this drum kit is at number 27, and we've checked this in the bottom-left box of the Arrange page. Finally, we've chosen a tempo of 115bpm as seen here in Logic's Transport Control.



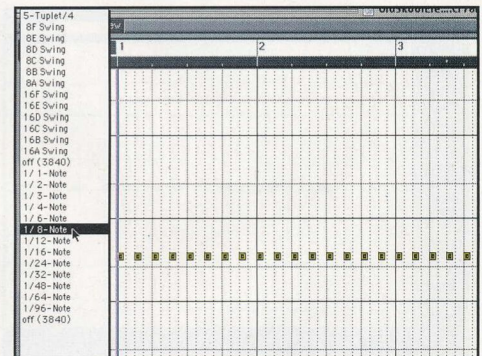
**3** We're going to start with the hi-hats on our CR-78 drum kit, and as you can see from the above image, we've inputted a very simple eight-beat pattern on the closed hi-hat found at F#1. If your sound source doesn't have a CR-78 kit, try assigning an 808-type one instead.



**4** One of the most limiting factors of these old drum boxes, aside from the sounds, was the fact that they were not velocity sensitive. As we are effectively trying to recreate an old skool electro vibe, it makes sense to try and emulate this limitation also.



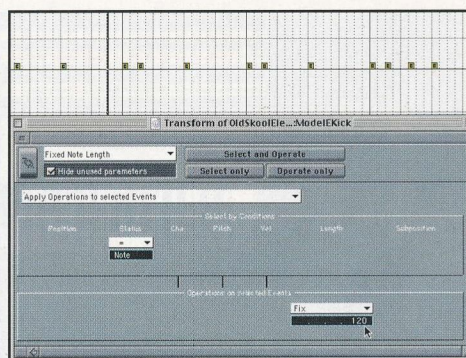
**5** To fix the velocity of a part within Logic, we have several options available. The one seen here is to open the Transform window and first select the Velocity limiter function and then 'Fix parameter' followed by the desired numerical value. In this instance, we've chosen a fixed value of 78.



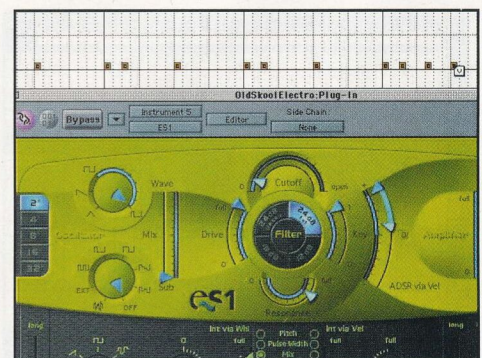
**6** Another critical thing to remember when trying to emulate vintage beat boxes is the mandatory rigid quantising they had. There were no such things as groove quantises in those days, and it's this rigidity that helps create the vibe associated with the era. Here we've opted for a strict eighth note quantise template.



**7** Although we've used the CR-78 for our hi-hat sound, for snare and kick parts, programmers would often have to look to analogue synthesizers in order to provide the necessary surrogate sounds. We can do the same using VST instruments, and here we've chosen a preset kick drum sound found on the Model•E.

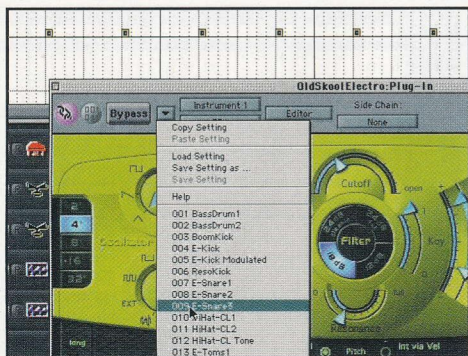


**8** Here we see the kick drum part relating to the Model•E. Again, we've used the Transform window to fix the velocity of this part to a value of 66. Finally, we've made sure that all the notes play for the same duration by using the Transform function to fix the note length at 1/120 of a beat.

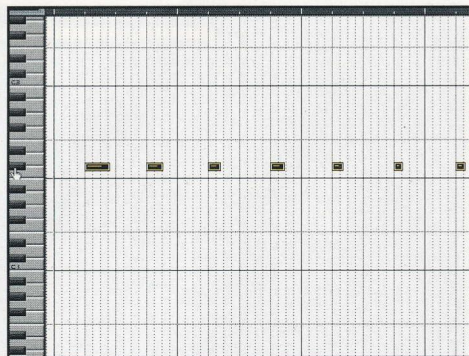


**9** Now we need to add some punch to the front end. To do this, we've copied our kick pattern to another audio instrument channel and assigned the Reso kick sound from Logic's ES1 synth. In order to get the right combination of Model•E and ES1, we've transposed the ES1 kick down to C1 and increased its velocity.

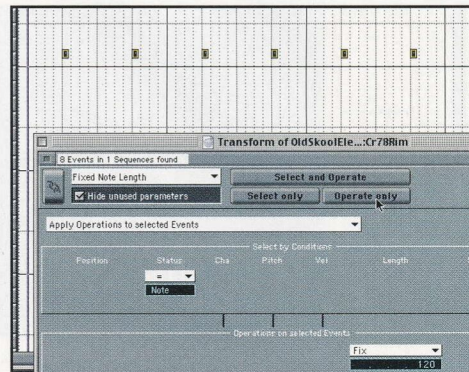
## Electro: Back to the old skool (Continued)



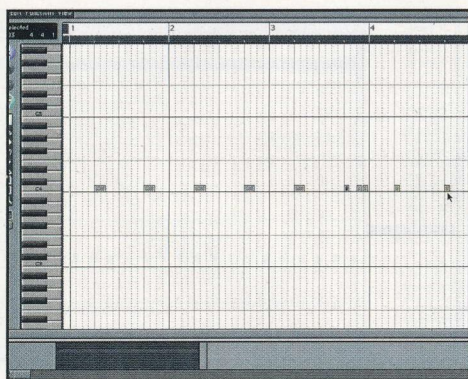
**10** Actually, the ES1 is perfectly suited to getting decent electro sounds, and again, we've used this as the starting point for creating our snare sound. First we've programmed in a snare part on the second and fourth beat of each bar and then simply assigned it to another ES1 using the E-Snare3 preset.



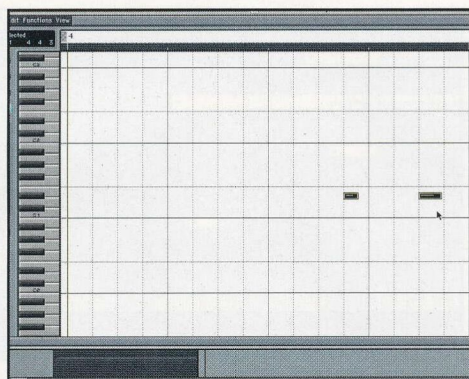
**11** Notice that at the moment the drum sounds are completely dry, which helps to create that cold, up-front sound. However, by cleverly mixing dry and effected sounds we can come up with better results. In this instance, we've copied our snare part to the rim sound of the CR-78 which contains reverb.



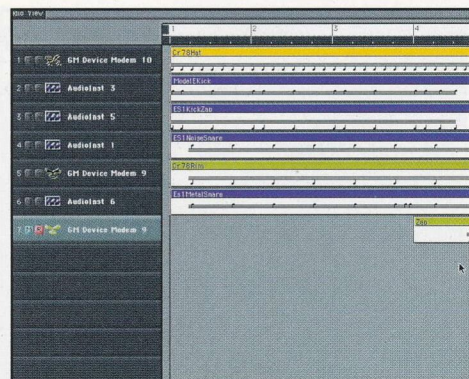
**12** As per our layered kick sounds, we've had to adjust the relative velocities of our two snare parts until we're happy with the mix. We've also taken care to quantise-fix the note length of each sound, again using the Transform window.



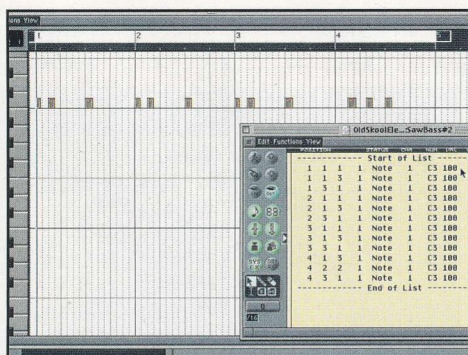
**13** Finally, to complete our snare drum sound, we've copied one of our original snare parts, selected another ES1 and assigned the metallic sounding HiHat Cl-Tone preset. We've also added a couple of beats at the end of the fourth bar to add a little interest to the part.



**14** One of the biggest sounds associated with all types of electro music is the 'zap'. We've found a variation of this sound on our CR-78 Kit at D#1, and have come up with a very simple two-hit part at the end of bar four to make our pattern a little more authentic.



**15** Now we have the basis of our drum pattern, we can move on to the instrumentation. For analogue anoraks, which many electro producers are, everything is all about pure waveforms. Therefore, we need to find a convincing a tone as possible.



**16** We could opt for another VST instrument at this point, but in the interest of keeping our CPU usage to a minimum, we've decided to choose a saw wave from the SC-8850 instead. We're using this sound as our bassline, so we've programmed the above part to syncopate with the kick drum.



**17** At the moment, with all parts playing, our track sounds not too dissimilar to Madonna's *Music*, which borrows heavily from old skool electro. However, with the help of one of the more esoteric VST instruments, we can give even a simple groove such as this more of an ancient feel.



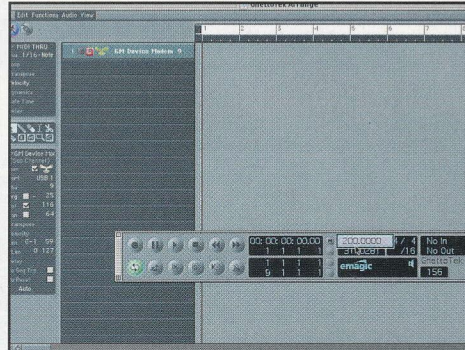
**18** If you thought that the M-Tron plug-in was strictly for prog rock, think again. Kraftwerk used the original instrument to great effect on albums such as *Trans Europe Express*. Here we've taken the classic string sound and played in the classic line from the aforementioned tune.

## GhettoTek: The new sound of Detroit

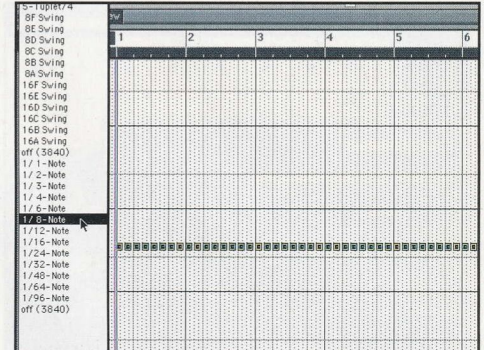
You'll all be listening to it in six months time...



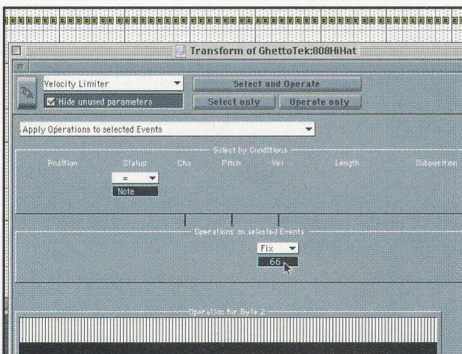
**19** The electro and breakbeat scenes are intrinsically linked, and you only have to check out the likes of Kraftwerk and Renee Pilgrim to hear that this is the case. More recently, Detroit has been responsible for the GhettoTek vibe, which fuses funk with electro. To create our GhettoTek-style track, we're going to work over a duration of eight bars.



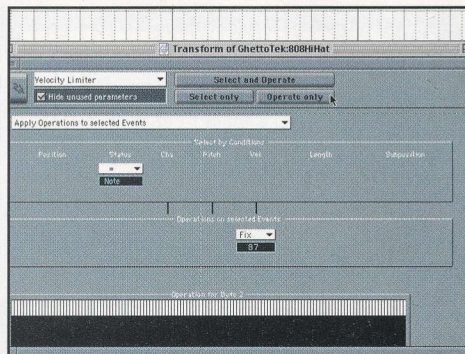
**20** For our drum pattern, we're going to use the TR-808 drum kit as the starting point, with a tempo of 200bpm as seen here in Logic's Transport Control. We could have opted to work at a tempo of 100bpm, but doubling the speed helps lock us into the speed of the groove a little more.



**21** Using the famous 808 hi-hat sound, we've programmed a sixteen-note pattern and quantised it using a straight eighth note template. The reason we've used an eighth note template for a sixteenth note pattern is because we've doubled the tempo from 100bpm to 200bpm.



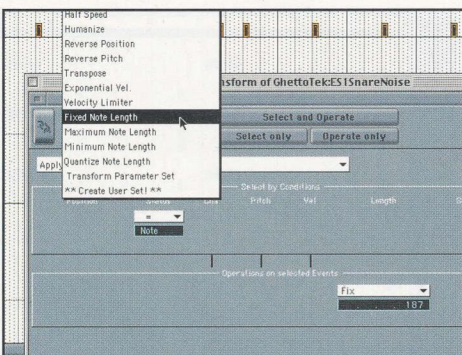
**22** Although drum boxes such as the TR-808 didn't respond to velocity, they did have an accent function which you could apply to selected beats. To emulate this useful feature we've started by applying a global Fix velocity value of 66 to all of our hi-hat hits, again using the Transform box.



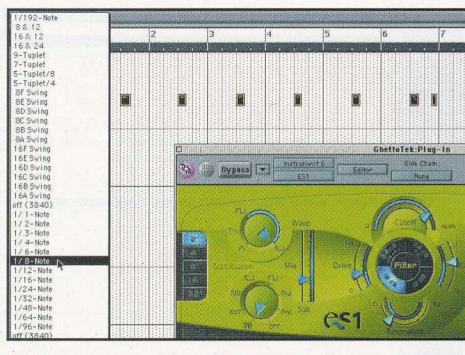
**23** To get our accented values, all we have to do is select the desired notes – which in this case are 1.1.1.1, 1.4.3.1 and 2.1.3.1 – continue over our eight bars and return to the Transform window. Here, we select the Fix velocity function as before, but increase the value to 87. Finally, we click on the Operate only button.



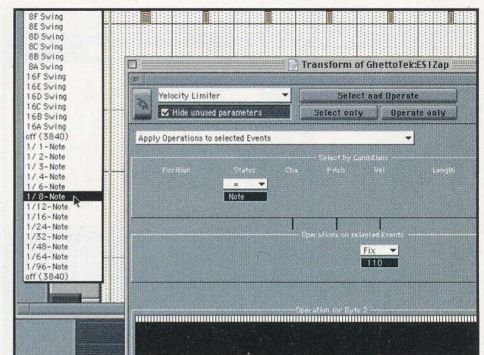
**24** For the first part of our composite snare sound we're going to use Logic's ES1 plug-in instrument again and select the same snare sound as before. For this part, we've programmed a simple pattern using the third beat of each bar, in addition to placing another hit on both 4.1.3.1 and 8.1.3.1.



**25** In keeping with the mechanical nature of electro, we've also fixed the velocity of these snare hits to a value of 100. Finally, we've used the Transform function to fix the length of each note. In order to do this, we've used a value of 1/187 of a beat, which helps keep all our hits nice and consistent.



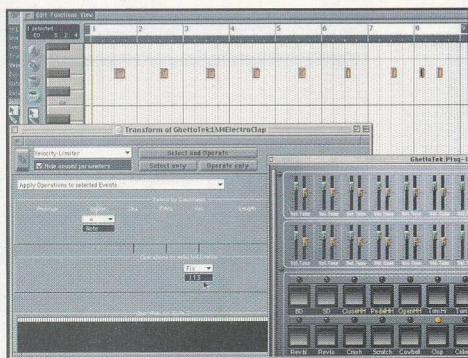
**26** Adding to our composite snare sound, we've chosen the metallic snare sound (as previously used in our old skool electro track) and come up with a pattern that works both with and against our original noise snare. As before, we've quantised this to an eighth note template. However, we haven't fixed the velocity as we want to retain some feel.



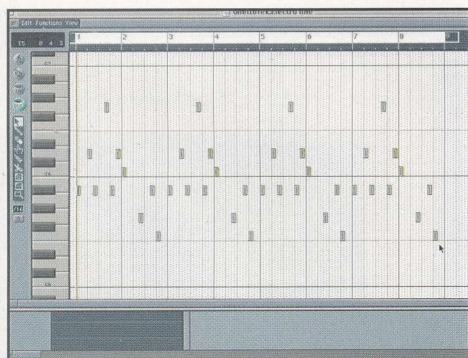
**27** For our snare parts, we've added another ES1, used the ubiquitous zap sound and programmed a part on the third beat of each bar. As before, we've quantised this using an eighth note template. Finally, we've added three hits in the second half of the final bar and fixed the velocity of everything to a value of 110.



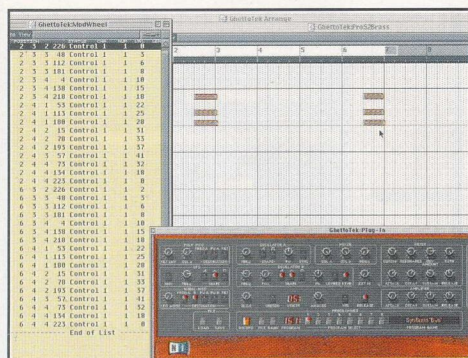
## GhettoTek: The new sound of Detroit (Continued)



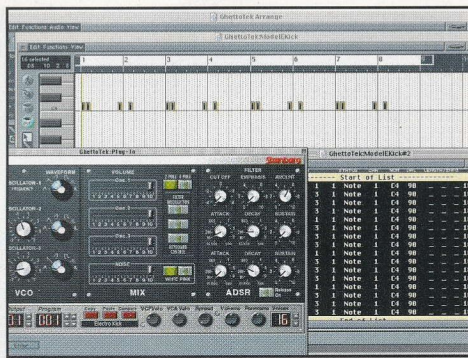
**28** Steinberg's LM4 has some great sounds, including two dedicated electro drum kits. To conclude our snare part, we've taken a clap sound from Electro kit 1 and simply programmed hits on the third beat of each bar with an added one at 8.1.3.1. We've taken care to quantise these to eighth notes and fix each value at 113.



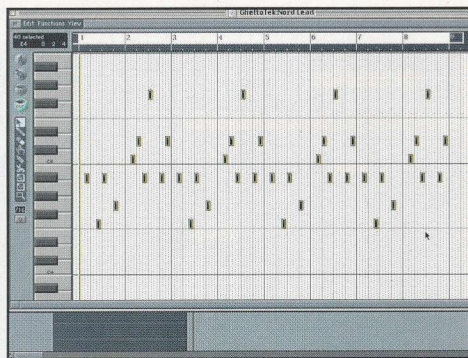
**31** While we're on the subject of analogue tones, here we've opted for a saw wave using our SC-8850. Actually, we've used a variation on the basic saw wave sound at Program Change 82, and we can further shape this to suit by using Controllers 71 and 74 for Resonance and Filter Cutoff respectively.



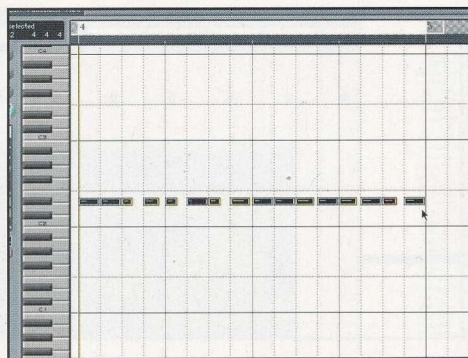
**34** For something a little more harsh, we've opted for a brass sound from the Pro52. You'll see that we've played a very simple chord which works well rhythmically with the previous ES1 line. However, we've also recorded some mod wheel info onto a separate track to give us that Grandmaster Flash vibe.



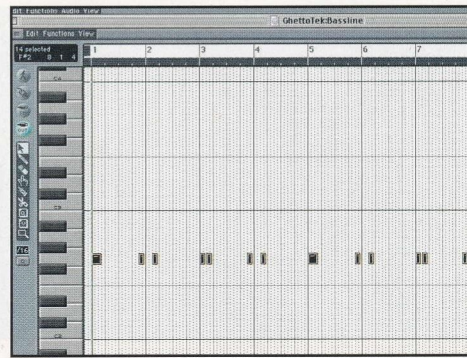
**29** Here we've taken Steinberg's Model-E and programmed a part using the same kick sound as our previous electro track. We've fixed the velocity of our notes at 90, fixed the note length at 1/187 of a beat, and quantised everything to eighth notes. You can now hear how our kick syncopates with the accented hi-hat beats.



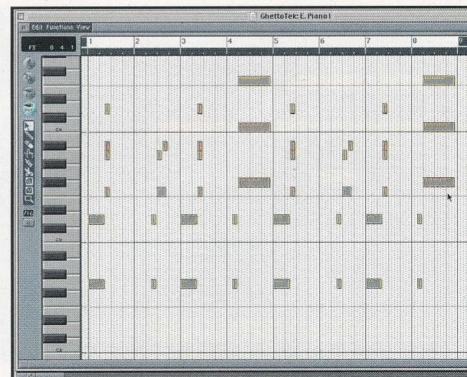
**32** For this line, we've simply taken our previous one and reversed the phrase, being sure to work within the appropriate bars using our beloved Transform menu, before delaying the whole phrase by an eighth note. In order to get a realistic and complimentary analogue tone, we've assigned this to a Nord Lead patch.



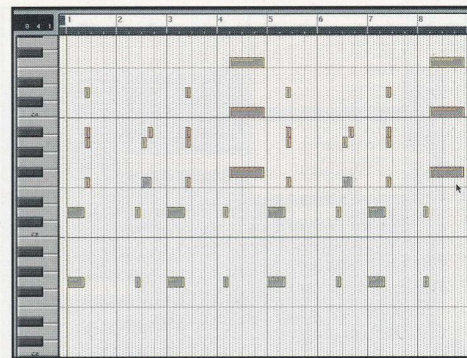
**35** Just to help round things off a little and add some interest, we've returned to our 808 and added these zaps at the end of the fourth bar. The way these are structured is very similar to the way many Nu Skool R&B producers use kick drums, and this seems to be one of the main features of GhettoTek music.



**30** Talking of syncopation, here's our bassline, which works in unison with our kick drum and, of course, the hi-hat accents. Electro basslines are, on the whole, single note affairs using straightforward analogue bass tones. That said, there's no reason why you shouldn't experiment with your own basslines.



**33** Now it's back to the ES1 for a funk riff. Essentially, we've used a brass tone with a slowish attack, developed a two bar riff and looped it for the eight-bar duration. It has to be said that the ES1 is perfect for these types of sounds and demands minimal CPU power, too.



**36** Last of all – and this is strictly down to taste – we've added a jazzy Rhodes riff. As we said at the beginning of this tutorial, most styles evolve because people take the raw ingredients and add their own character and feel to the genre. Well, what are you waiting for? Get to it...